Applicant: Cho et al. **Application No.:** 10/626,344

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (currently amended) A gold (Au) alloy bonding wire for a semiconductor device comprising in which at least one of polonium (Po), promethium (Pm), thulium (Tm), and boron (B) is added to high-purity gold having a purity of 99.999% or more greater in an amount of 3-30 parts per million (ppm) by weight and at least one of magnesium (Mg), sodium (Na), vanadium (V), molybdenum (Mo), and technetium (Tc) [[is]] added in an amount of 3-30 ppm by weight to the high-purity gold.
- 2. (Original) The Au alloy bonding wire of claim 1, wherein palladium (Pd) is further added to the high-purity gold in an amount of 100-1,000 ppm by weight.
- 3. (Original) The Au alloy bonding wire of claim 1, wherein calcium (Ca) is further added to the high-purity gold in an amount of 30-80 ppm by weight.
- 4. (Original) The Au alloy bonding wire of claim 1, wherein lanthanum (La) is further added to the high-purity gold in an amount of 20-80 ppm by weight.
- 5. (Original) The Au alloy bonding wire of claim 2, wherein Ca is further added to the high-purity gold in an amount of 30-80 ppm by weight.
- 6. (Original) The Au alloy bonding wire of claim 2, wherein La is further added to the high-purity gold in an amount of 20-80 ppm by weight.

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- 7. (Original) The Au alloy bonding wire of claim 3, wherein La is further added to the high-purity gold in an amount of 20-80 ppm by weight.
- 8. (Original) The Au alloy bonding wire of claim 5, wherein La is further added to the high-purity gold in an amount of 20-80 ppm by weight.
- 9. (Original) The Au alloy bonding wire of claim 8, wherein a diameter of the Au alloy bonding wire is $10\text{-}50~\mu m$.